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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,352	02/14/2001	Donald J. Lewis	200-1731	1057

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EXAMINER

TRAN, DIEM T

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 05/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/783,352

Applicant(s)

Lewis

Examiner

Diem Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above, claim(s) 1-4 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-7 and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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DETAILED ACTION

-This office action is in response to the amendment filed on 2/8/02.

-In applicant's amendment, claims 1- 4, 8 were canceled, and claims 11-13 are added.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 5-7, 9, 10, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Modica et al. (US Patent 5,916,129).

Regarding claim 5, Modica discloses a method of controlling an air-fuel ratio in an internal combustion engine, comprising the steps of purging hydrocarbons from an emission control device (see col. 3, lines 39-49); and the step of adjusting the air-fuel ratio in the engine rich of stoichiometry while purging the hydrocarbons (see col. 10, lines 28-45; col. 15, lines 29-39).

Regarding claim 6, Modica further discloses said purging step comprises providing air from an air supply device to an exhaust stream upstream of said hydrocarbon trap (see col. 10, lines 8-9, lines 41-45)

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Regarding claims 7, 10, Modica further discloses said air supply device is an air pump (see col. 10, lines 39-40).

Regarding claim 9, Modica discloses a system for controlling an air/fuel ratio in an internal combustion engine, comprising:

a hydrocarbon trap positioned in an exhaust path downstream of the engine; an air supply device capable of selectively providing a supply air to said exhaust path upstream of said hydrocarbon (see Figure 1); a controller for biasing the air-fuel ratio in the engine rich of stoichiometry during a time period when said air pump is providing air to said exhaust path (see col. 10, lines 28-31, lines 41+; col. 11, lines 37-41).

Regarding claim 11, Modica discloses a method for controlling an engine, said engine communicating with a first emission control device, said first emission control device communicating with a second emission control device, said method comprising:

combusting an air/fuel mixture rich of stoichiometry in an engine cylinder to reduce Nox stored in said first emission control device (see col. 15, lines 29-33);

apply oxygen upstream of said second emission control device to oxidize hydrocarbons stored in said second emission control device and hydrocarbons from said combusted rich air - fuel mixture (see col. 10, lines 28+; col. 11, lines 37-41; col. 15, lines 32+).

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Modica et al. (US Patent 5,916,129) in view of Karlsson et al. (US Patent 6,354,078).

Regarding claim 12, Modica discloses all the claimed limitations as discussed in claim 11 above, however, fails to disclose the step of indicating when said second emission control device needs to be purged of hydrocarbons. Karlsson teaches that it is conventional in the art, to utilize the step of indicating when said second emission control device needs to be purged of hydrocarbons (see col. 7, lines 64-67).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the step of indicating when said second emission control device needs to be purged of hydrocarbons as taught by Karlsson in the Modica method, since the use thereof would have improved the efficiency of the emission control system

Regarding claim 13, Karlsson further teaches that the step of indicating when said second emission control device needs to be purged of hydrocarbons includes the steps:

measuring a temperature of exhaust gases entering said second emission control device;

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determining when said second emission control device needs to be purged of hydrocarbons when said temperature is greater than a threshold temperature (see col. 7, lines 64-67).

Response to Arguments

5. Applicant's arguments filed 2/8/02 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

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Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (703) 308-6073. The examiner can normally be reached on Monday -Friday from 8:00 a.m.-5:30p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (703) 308-2623. The fax number for this group is (703) 308-7763.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.



Diem Tran
Patent Examiner
Art unit 3748

DT
May 3, 2002



THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700